



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/782,528	02/13/2001	Gera M. Strommer	2649/1F631US1	7543

7590

08/19/2003

DARBY & DARBY P.C
805 Third Avenue
New York, NY 10022

EXAMINER

MANTIS MERCADER, ELENI M

ART UNIT

PAPER NUMBER

3737

DATE MAILED: 08/19/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/782,528

Applicant(s)

STROMMER ET AL.

Examiner

Eleni Mantis Mercader

Art Unit

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-119 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-119 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3,4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-119 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-158 of copending Application No. 09/949,160. Although the conflicting claims are not identical, they are not patentably distinct from each other because they represent alternate variations and groupings.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 3737

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-16, 21-31, 37-48, 51-67, 71-88, 90-108, 110-119 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simon et al.'207 in view of Schweikard et al.'981.

Simon et al.'207 teach all the features of the current invention using a navigation system and an imager including a processor, connected to a display unit and to a database (col. 5, lines 61-67 and col. 6, lines 1-11 and see col. 9, lines 16-22 for stored images forming a database); a medical positioning system (MPS), connected to said processor, including a transducer MPS sensor and a surgical tool MPS sensor, said surgical tool MPS sensor being firmly attached to a surgical tool (col. 7, lines 45-61; note that any type of position localization can be utilized including magnetic fields); a two-dimensional imaging system, connected to said processor, including an imaging transducer, said transducer MPS sensor being firmly attached to said imaging transducer (col. 5, lines 31-40; col. 6, lines 64-67 and col. 7, lines 1-6; describing MPS sensor 109 attached on the fluoroscope); and a superimposing processor, connected to said processor (col. 11, lines 27-34).

Simon et al.'207 do not teach the use of gating or triggering, as is known in the art, of an inspected organ monitor interface, connected to the processor and to an organ monitor, the organ monitor monitoring an organ timing signal associated with an inspected organ. In the same field of endeavor, Schweikard et al.'981 teach gating or triggering, as is known in the art, of an inspected organ monitor interface, connected to the processor and to an organ monitor, the organ monitor monitoring an organ timing signal associated with an inspected organ (see Figure 8, see col. 6, lines 51-65 and see claims 11 and 23). This triggering or gating is performed so that

accurate treatment is performed compensating for movement of the patient such as movement of the chest due to respiration (see col. 2, lines 10-67 and col. 3, lines 1-22).

It would have been obvious to one skilled in the art at the time that the invention was made to have modified Simon et al.'207 and incorporated the triggering or gating of therapy on the basis of monitoring motion as taught by Schweikard et al.'981 in order to compensate for movement such as respiration especially when the surgical treatment is targeted in an area of interest such as in the thorax where there is abdominal movement rather than in an area of minimal movement such as the spine.

Different type of therapeutic devices and different type of imagers would have been an obvious modification to one skilled in the art at the time that the invention was made as that would depend on the type of imager available and the surgical procedure of interest.

5. Claims 17-20, 32-36, 49-50, 68-70, 89 and 109 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simon et al.'207 in view of Schweikard et al.'981 and further in view of Cosman'126.

Simon et al.'207 in view of Schweikard et al.'981 teach all the features of the current invention except for the use of goggles as a form of display. In the same field of endeavor Cosman'126 teaches the use of goggles as an alternative way to present the image information to the surgeon (see Figure 24 and col. 30, lines 19-49), so that the surgeon sees all the information in the same field of view as in the direction of the patient.

It would have been obvious to one skilled in the art at the time that the invention was made to have modified Simon et al.'207 in view of Schweikard et al.'981 and incorporated the teaching of Cosman'126, because that would allow the surgeon to continue to look the patient

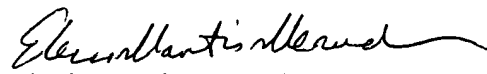
Art Unit: 3737

during surgery while visualizing the images through his goggles and not having to avert his/her eyes to look at a near by display.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eleni Mantis Mercader whose telephone number is 703 308-0899. The examiner can normally be reached on Mon. - Fri., 8:00 a.m.-6:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marvin Lateef can be reached on 703 308-3256. The fax phone numbers for the organization where this application or proceeding is assigned are 703 305-3590 for regular communications and 703 308-0758 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0858.


Eleni Mantis Mercader
Examiner
Art Unit 3737

EMM
August 11, 2003